

WATER TREATMENT PLANT OPERATOR

GRADE: 16

FLSA: NON-EXEMPT

CHARACTERISTICS OF CLASS:

The Water Treatment Plant Operator performs intermediate technical work performing operational, analytical, and maintenance tasks necessary to provide a potable and palatable water within the Federal and State standards. Work involves responsibility for the safe and efficient operation of chemical and plant controls and the maintenance of plant equipment in proper condition.

EXPECTATIONS OF ALL CITY EMPLOYEES:

- Learn and demonstrate an understanding of City, department, division and team goals.
- Serve and meet the needs of customers during routine or emergency situations.
- Ability and willingness to work as part of a team, to demonstrate team skills and to perform a fair share of team responsibilities.
- Ability to assess his/her work performance or the work performance of the team.
- Plan and organize his/her work, time and resources, and if applicable that of subordinates.
- Contribute to the development of others and/or the working unit or overall organization.
- Produce desired work outcomes including quality, quantity and timeliness.
- Communicate effectively with peers, supervisors, subordinates and people to whom service is provided.
- Understand and value differences in employees and value input from others.
- Consistently report to work and work assignments prepared and on schedule.
- Consistently display a positive behavior with regard to work, willingly accept constructive criticism and be respectful of others.

EXAMPLES OF DUTIES:

- Monitors operating conditions of the entire treatment process and makes all necessary adjustments to keep the process within established guidelines.
- Performs daily physical, chemical and microbiological testing of incoming, process and outgoing water (i.e., turbidity, pH, hardness, lead, zinc and coliform).
- Starts and stops pumps, motors, chemical feeders and other equipment as needed.
- Performs pH tests on raw, settled and finished water; makes fluoride and taste and odor control tests to determine proper amount of lime or soda ash needed to counteract acidity.
- Performs fluoride tests to regulate use of fluorides; makes other prescribed chemical and bacteriological tests.

- Keeps laboratory and such laboratory apparatus as test tubes, burettes and beakers clean and in an orderly condition.
- Inspects plant; records information from various charts and gauges and enters readings and test results in accordance with prescribed reporting system; adjusts operations to remedy raw and finished water conditions and to meet necessary use demands.
- Records head loss, rate of flow of filters, and determines when filters should be backwashed; operates filters controls in backwashing filters.
- Replaces and connects various drums and tanks when empty.
- Greases and oils machinery, fills chemical hoppers, cleans bar screens, replaces belts and does other maintenance and minor plant repair work as necessary.
- Performs related work as necessary.
- Responsible for providing thorough operations and testing a potable and palatable water that meets or exceeds Federal and State standards in sufficient quantity to meet demand.
- Responsible for performing required preventive maintenance on all equipment and repair equipment that breaks down in order to maintain operations.
- Responsible for performing correctly split microbiological samples once a year to maintain laboratory analyst certification.
- Responsible for attending 30 hours of training every three years to maintain operator certification status.
- Responsible for responding when requested by the supervisor to any emergency at the water plant in order to maintain operations.

QUALIFICATIONS:

Required Training and Experience:

Any combination of training and experience substantially equivalent to graduation from high school, and possession of a Maryland Class 4 Water Plant Operator License. Possession of a valid driver's license as issued by the Maryland Department of Motor Vehicles required.

Preferred Knowledge, Skills and Abilities:

- Thorough knowledge of the principles and practices involved in the operation of large electric motors, pumps, chemical feeders and other electromechanical equipment.
- General knowledge of chemistry, hydraulics, and mathematics.
- Thorough knowledge and understanding of the operations and functions of the water treatment and pumping plant and the necessity for maintaining strict control conditions.
- Thorough knowledge of laboratory procedures, of mechanical and electrical maintenance, and of equipment and hand tools used therein.
- General knowledge of basic hydraulics, mathematics, chemistry, physics, electricity and electronics.

- General knowledge of the Federal and State water quality standard especially the Safe
- Drinking Water Act and amendments and the required reporting requirements, Federal and State safety regulations for a Class 4 water plant operation, especially OSHA, MOSHA, Right-To-Know, Underground Tank Regulations, and SARA Title III.
- Ability to ascertain and remedy abnormalities in the routine operation of mechanical, electrical and hydraulic equipment based on observation and results of laboratory tests.
- Ability to read meters and charts accurately, to maintain records of shift operations, and to complete complex operating reports accurately.
- Ability to understand and follow detailed laboratory and operating procedures, and to keep accurate records of actions taken.
- Ability to perform mathematical computations rapidly and accurately.
- Ability to adapt available tools and repair parts to specific repair problems.
- Ability to diagnose and correct the faulty functioning of pumps, large electric motors, controls and allied appurtenances.
- Ability to establish and maintain effective working relationships with fellow employees and supervisors.
- Sufficient physical strength and agility to climb ladders, work in tight places for extended periods of time, and lift heavy objects.